

Revisions to the Unregulated Contaminant Monitoring Rule Fact Sheet

EPA has revised the Unregulated Contaminant Monitoring Rule (UCMR), as required by the 1996 Amendments to the Safe Drinking Water Act. The rule was published on September 17, 1999, and supplemented on March 2, 2000 and January 11, 2001. The data generated by the new UCMR will be used to evaluate and prioritize contaminants on the Drinking Water Contaminant Candidate List, a list of contaminants EPA is considering for possible new drinking water standards. This data will help to ensure that future decisions on drinking water standards are based on sound science.

The new rule includes:

- Three different lists of contaminants based on the availability of established analytical methods
- Requirements for all large public water systems (PWS) and a representative sample of small PWS to monitor for those contaminants on List 1
- Requirements for selected large and small PWS to monitor for those contaminants on List 2
- Requirements to submit the monitoring data to EPA and the States for inclusion in the National Drinking Water Contaminant Occurrence Database
- Requirements to notify consumers of the availability of the results of monitoring
- Requirements to include detected contaminants in Consumer Confidence Reports

The UCMR Monitoring List (see Table 1 below) includes all 34 contaminants in the Contaminant Candidate List, Occurrence Priorities column, and two radionuclides that emerged during regulation development. The UCMR Monitoring List is comprised of three separate lists based on analytical methods readiness and current contaminant occurrence data: List 1 for Assessment Monitoring, List 2 for Screening Surveys and List 3 for Pre-Screen Testing.

The Safe Drinking Water Act, as amended in 1996, requires EPA to limit monitoring requirements to 30 contaminants in any 5-year cycle. Since many of the contaminants still have analytical methods under development, the success of the methods development efforts will dictate which contaminants will be monitored in the 5-year cycle. While the UCMR Monitoring List has 36 contaminants on it, the regulation will only require monitoring for the 12 contaminants on List 1, beginning in 2001 at all large PWS and the selected small PWS. It also requires monitoring for the List 2 contaminants, which have methods listed, beginning in 2001.

List 1 - Assessment Monitoring

List 1 includes 12 chemical contaminants for which analytical methods exist. EPA has information on their occurrence in drinking water for some PWS, but not a national estimate of their extent of occurrence. Monitoring for List 1 contaminants at PWS is the specific action resulting from the September 17, 1999 rule.

Monitoring of List 1 (referred to as Assessment Monitoring) contaminants will occur at approximately 2,800 large PWS and a representative sample of 800 (out of 66,000) small

PWS. Transient water systems are not required to monitor nor are systems which purchase 100% of their water. The monitoring results from these systems will be used to estimate national occurrence of the 12 contaminants on List 1. The 800 small systems will be selected at random from all small systems. Each State will have a number of systems allocated to it, based on population served.

Surface water systems will monitor quarterly during a 1-year period and ground water systems will monitor twice in a 1-year period. Assessment Monitoring must be done within the three years of 2001 to 2003, which will allow coordination with the 3-year compliance (for regulated contaminants) monitoring cycle. One of these quarterly or semiannual sampling events must occur in the most vulnerable period of May through July, or an alternate vulnerable period designated by the State, to ensure monitoring of potentially higher contaminant concentrations.

SDWA requires EPA to pay for the reasonable testing costs for the representative sample of small systems. The estimated average annual cost for monitoring List 1 contaminants is \$8.4 million, of which the average annual cost of the representative sample to EPA is \$2.0 million. The average costs to individual systems required to monitor are: small systems serving 10,000 or fewer persons, \$21; and large systems serving more than 10,000 persons, \$1,730.

List 2 - Screening Surveys

List 2 contaminants are those for which analytical methods have just been developed and for which EPA has less occurrence data than the contaminants on List 1. There are 13 organic chemicals and one microorganism which must be monitored for List 2. Monitoring for List 2 (referred to as Screening Survey) contaminants will occur with the promulgation of the January 11, 2001 rule. The monitoring program will be the same as that for List 1, but only for a randomly selected set of 300 large and small systems. This will occur in two phases. The Screening Survey for the 13 List 2 chemical contaminants will occur in 2001 at selected small systems and in 2002 at selected large systems. The Screening Survey for the List 2 microorganism (i.e., *Aeromonas*) will occur in 2003 (pending promulgation of a UCMR Methods Update Federal Register Notice (MUFRN)) for all selected systems. Any occurrence of a List 2 contaminant may indicate the need for more extensive national monitoring and that this contaminant should be included in the next cycle of List 1 monitoring.

List 3 - Pre-Screen Testing

List 3 contaminants include seven microorganisms known to have health effects and two radionuclides. These contaminants have recently emerged as drinking water concerns and, in most cases, only have methods in an early stage of development. Monitoring of List 3 (referred to as Pre-Screen Testing) contaminants will be performed only after future rulemaking specifies methods. It will need to be determined whether a listed contaminant occurs in sufficient frequency in the most vulnerable systems or sampling locations to warrant its being included in future Assessment Monitoring or Screening Surveys. EPA will also be evaluating the method performance for List 3 contaminants. EPA will select up to 200 large and small systems from State nominations of systems believed to be most vulnerable to List 3 contaminants. Because these methods are expected to be expensive, since they are labor intensive, the monitoring program will likely be implemented on a semiannual basis.

The use of this tiered approach for implementing the three monitoring lists provides the maximum capability to monitor up to the statutory limit of no more than 30 contaminants in

any 5-year monitoring cycle. Therefore, as List 3 contaminants are found to occur in PWS, they may move up to List 2, and likewise, List 2 contaminants may move up to List 1, in 2004, when the UCMR is revised again. The law requires that EPA publish a new contaminant monitoring list every 5 years.

State-EPA Implementation Partnership

SDWA provides for State Monitoring Plans for small systems included in the national representative sample. The rule provides the opportunity for States to work with these small systems to ensure the highest data quality. This opportunity includes establishing a Partnership Agreement between the State and EPA for States to accept or modify the initial monitoring plan, determine an alternate vulnerable monitoring time, modify the timing of monitoring to coordinate with compliance monitoring, identify alternate sampling points, notify systems of monitoring responsibilities, provide instructions to small systems, participate in Screening Survey for List 2 and Pre-Screen Testing for List 3, and provide additional locational information for systems.

Table 1. UCMR Monitoring List		
LIST 1 Assessment Monitoring of Contaminants with Available Methods	LIST 2 Screening Surveys of Contaminants with Methods Just Developed	LIST 3 Pre-Screen Testing of Contaminants Needing Research on Methods ²
2,4-dinitrotoluene 2,6-dinitrotoluene Acetochlor DCPA mono-acid degradate DCPA di-acid degradate 4,4'-DDE EPTC Molinate MTBE Nitrobenzene Perchlorate Terbacil	1,2-diphenylhydrazine 2-methyl-phenol 2,4-dichlorophenol 2,4-dinitrophenol 2,4,6-trichlorophenol Diazinon Disulfoton Diuron Fonofos Linuron Nitrobenzene Prometon Terbufos Aeromonas ¹ Alachlor ESA ² RDX ²	Lead-210 Polonium-210 Cyanobacteria Echoviruses Coxsackieviruses Helicobacter pylori Microsporidia Caliciviruses Adenoviruses

¹ Monitoring will occur pending promulgation of a UCMR MUFRN.

² The monitoring period for Alachlor ESA, RDX and all List 3 contaminants will be performed only after future rulemaking specifies methods.

Other Information

For general information on the Unregulated Contaminant Monitoring Regulation, contact the Safe Drinking Water Hotline, at 800-426-4791. The Safe Drinking Water Hotline is open Monday through Friday, excluding Federal holidays, from 9:00 a.m. to 5:30 p.m. EST.

